

REMARKS

Claims 1 and 3-13 are pending in the application. By this Amendment, the specification and claims 1 and 3-9 are amended, claim 2 is canceled without prejudice to or disclaimer of the subject matter contained therein, and claims 10-13 are added. The amendments to claims 1 and 3 merely make explicit what was already implied, and as such do not narrow the scope of the claims. Reconsideration in view of the above amendments and following remarks is respectfully requested.

The specification is amended to include section headings as suggested by the Office Action.

The Office Action rejects claims 1-9 under 35 U.S.C. §112, second paragraph. Applicant asserts that the above-outlined amendments obviate the grounds for the rejection, e.g. by specifying in claims 1 and 3 that a resonant cavity is filled with gas that includes an Ne²⁰ isotope and an Ne²² isotope. Accordingly, Applicant respectfully requests that the rejection of the claims under 35 U.S.C. §112, second paragraph, be withdrawn. Inasmuch as the assertion that the phrase "an interferometric displacement determination device" renders former claim 3 indefinite may apply to the new claims that recite "an interferometric displacement determination device," Applicant respectfully notes that the specification supports these claims and that Applicant is entitled to claim any novel subject matter disclosed in the specification. The claimed interferometric displacement determination devices are novel, as discussed below.

The Office Actions rejects claims 1-9 under 35 U.S.C. §102(e) over Deck (U.S. Patent No. 6,434,176). Applicant respectfully traverses this rejection.

Specifically, Deck fails to disclose or suggest an optical apparatus comprising a frequency stabilized linear HeNe gas laser wherein the Ne content includes a Ne²⁰ isotope

and an Ne^{22} isotope in substantially equal proportions, as recited in independent claim 1 and similarly recited in independent claim 3.

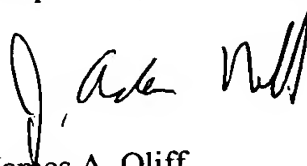
Deck instead discloses a frequency stabilized laser system with an adjustable cavity length (Abstract) and that produces a control beam (104, Fig. 1B) that can be split off using a beam splitter (col. 5, lines 58-61). However, although Deck does disclose a HeNe laser (120, Fig. 1B; col. 5, lines 27-30) and an optical feedback (Abstract, lines 9-12), Deck fails to disclose or suggest Ne^{20} and Ne^{22} isotopes, and that these isotopes are in substantially equal proportions. In fact, Deck does not disclose any Ne isotope. Therefore, the Deck apparatus does not provide the advantage of the claimed invention that is described at, e.g., page 4, lines 9-16. For at least this reason, Deck fails to disclose or suggest each and every feature of independent claims 1 and 3, and therefore Applicant asserts that independent claims 1 and 3, and their dependent claims, define patentable subject matter. Therefore, Applicant respectfully requests that the rejection of the claims under 35 U.S.C. §102(e) be withdrawn.

Furthermore, new independent claims 10-13 also recite the above-described Ne^{20} and Ne^{22} isotopes which are not disclosed or suggested by Deck as discussed above. As such, Applicant asserts that independent claims 10-13 also define patentable subject matter.

In view of the foregoing amendments and remarks, Applicant submits that this Application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1 and 3-13 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



James A. Oliff
Registration No. 27,075

J. Adam Neff
Registration No. 41,218

JAO:TMN/dap

Date: June 12, 2003

Attachment: Amendment Transmittal

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

<p>DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p>
